What is claimed is

1. A silicone rubber graft copolymer with core-shell structure having at least one core a) composed of an organosilicon polymer which has the general formula $(R_2SiO_{2/2})_x \cdot (RSiO_{3/2})_y \cdot (SiO_{4/2})_z$ where x = from 0 to 99.5 mol%, y = from 0.5 to 100 mol%, z = from 0 to 50 mol%, where R means identical or different alkyl or alkenyl radicals having from 1 to 6 carbon atoms, aryl radicals, or substituted hydrocarbon radicals, and also at least one shell c) composed of an organic polymer, obtainable by preparing the organic shell c) by free-radical polymerization at a temperature of not higher than 65°C and adding the initiator in at least two portions to the reaction vessel, a further addition taking place at least 2 minutes after the start of the polymerization.

2. The silicone rubber graft copolymer as claimed in claim 1, characterized in that the initiator is added in three, in particular four, and preferably five, portions to the reaction vessel, each addition taking place after at least 2 minutes.

3. The silicone rubber graft copolymer as claimed in claim 1 or 2, characterized in that the initiator is added continuously over a period of at least one hour to the reaction vessel.

4. The silicone rubber graft copolymer as claimed in one or more of the preceding claims, characterized in that the monomers are added continuously over a period of at least one hour to the reaction vessel.

5. The silicone rubber graft copolymer as claimed in one or more of the preceding claims, characterized

in that the monomers and the initiator are added in the form of a mixture to the reaction vessel.

6. The silicone rubber graft copolymer as claimed in one or more of the preceding claims, characterized in that the concentration of initiator in the reaction vessel is kept below 0.05% by weight, based on the entire reaction mixture.

7. The silicone rubber graft copolymer as claimed in one or more of the preceding claims, characterized in that between the core a) and the shell c) there is another spherical polydialkylsiloxane layer b) present, composed of ($R_2SiO_{2/2}$) units.

8. The silicone rubber graft copolymer as claimed in one or more of the preceding claims, characterized in that the particle diameter of the silicone rubber graft copolymers is in the range from 10 to 300 nm.

9. The silicone rubber graft copolymer as claimed in one or more of the preceding claims, characterized in that graft copolymer is composed of
from 0.05 to 95% by weight, based on the total weight of the copolymer, of a core a) composed of an organosilicon polymer,
from 0 to 94.5% by weight, based on the total weight of the copolymer, of a polydialkylsiloxane layer b), and
from 5 to 95% by weight, based on the total weight of the copolymer, of a shell c) composed of organic polymers.

10. The silicone rubber graft copolymer as claimed in one or more of the preceding claims, characterized in that the shell c) comprises polymerized (meth)acrylates.

11. The silicone rubber graft copolymer as claimed in claim 10, characterized in that the shell c) has been obtained via polymerization of a mixture in which methacrylates and acrylates are present.

12. The silicone rubber graft copolymer as claimed in claim 11, characterized in that the shell c) has been obtained via polymerization of a mixture in which methyl methacrylate and at least one acrylate having from 1 to 8 carbon atoms are present.

13. The silicone rubber graft copolymer as claimed in one or more of the preceding claims, characterized in that vinyl groups are present in the core a) composed of an organosilicon polymer prior to preparation of the organic shell c).

14. The silicone rubber graft copolymer as claimed in claim 13, characterized in that the content of the vinyl groups in the core a) is in the range from 2 to 3 mol%, based on the weight of the core.

15. A process for preparing silicone rubber graft copolymers as claimed in claims 1 to 14, characterized in that a core is prepared from polysiloxane by the emulsion polymerization process, and then organic monomers are grafted onto the resultant polysiloxane by a free-radical route, initiator being added continuously during the free-radical polymerization.

16. The process as claimed in claim 15, characterized in that use is made of an initiator system in which a reducing agent is present.

17. The process as claimed in claim 15 or 16, characterized in that use is made of butyl hydroperoxide as initiator.

18. An impact-resistant molding composition comprising silicone rubber graft copolymers as claimed in one or more of claims 1 to 14.

19. The impact-resistant molding composition as claimed in claim 18, characterized in that the molding composition comprises poly(meth)acrylates.

20. The impact-resistant molding composition as claimed in claim 18 or 19, characterized in that the molding composition comprises styrene-acrylonitrile polymers.

21. The impact-resistant molding composition as claimed in claim 20, characterized in that the styrene-acrylonitrile polymers have been obtained via polymerization of a mixture which is composed of
from 70 to 92% by weight of styrene
from 8 to 30% by weight of acrylonitrile, and
from 0 to 22% by weight of other comonomers, based in each case on the total weight of the monomers to be polymerized.

22. The impact-resistant molding composition as claimed in one or more of claims 18 to 21, characterized in that the molding composition comprises at least one acrylate-rubber-based impact modifier.

23. The impact-resistant molding composition as claimed in one or more of claims 18 to 22, characterized in that the molding composition is composed of
f1) from 0 to 95% by weight of (meth)acrylate polymers,
f2) from 0 to 45% by weight of styrene-acrylonitrile polymers,

f3) from 5 to 60% by weight of silicone rubber graft copolymers as claimed in one or more of claims 1 to 11

f4) from 0 to 60% by weight of polyacrylate-rubber-based impact modifiers, based in each case on the weight of components f1) to f4) and conventional additives.

24. A molding produced from a molding composition as claimed in one or more of claims 18 to 23.

25. The impact-resistant molding as claimed in claim 24, characterized in that the molding has a Vicat softening point to ISO 306 (B50) of at least 85°C, a notched impact strength NIS (Izod 180/1eA, 1.8 MPa) to ISO 180 of at least 3.0 kJ/m^2 at -20°C and of at least 2.5 kJ/m^2 at -40°C, a modulus of elasticity to ISO 527-2 of at least 1500 MPa.